## Mechanical Compression Device (MCD)

### For Adults Only

<table>
<thead>
<tr>
<th>Airway</th>
<th>Compressions (round 1)</th>
<th>Chest Compressions</th>
<th>Metronome, Defibrillator set-up</th>
</tr>
</thead>
</table>
| **P1** | 1. Defibrillate immediately if VT/VF  
2. Set up BVM & connect to Oxygen/ETCO2  
3. Provide cadence and count for EMT  
4. Provide high quality 1-person BVM breaths every 10 compressions  
5. Charge defibrillator at 16th breath | 1. Shake and Shout (no pulse check)  
2. Open airway and move to floor with adequate space  
3. Start high quality chest compressions  
4. Change compressor every 2 minutes (Limit changes/pulse checks to < 5 seconds) | 1. Activate metronome at 110 bpm  
2. Cut shirt  
3. Attach defibrillator pads  
4. Can start set up of MCD if compressions aren’t compromised. |

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<tr>
<th>Rhythm Check, Defibrillation</th>
<th>Pulse Check</th>
<th>Pulse Check</th>
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</table>
| **P1** | 1. ETCO2 and Rhythm Check  
2. If indicated (VT/VF), clear and defibrillate patient. If not indicated, dump charge | 1. Pulse Check  
2. Prepare to start high quality compressions | 1. Pulse Check  
2. Prepare to start high quality compressions |

<table>
<thead>
<tr>
<th>Airway</th>
<th>Compressions (round 2)</th>
<th>Set up and Lay Out MCD within 2 minutes</th>
</tr>
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</table>
| **P1** | 1. Provide high quality 1-person BVM breaths every 10 compressions  
2. Provide cadence and count for compressor  
3. Charge defibrillator at 16th breath | 1. Unpack Back Plate and Mechanical Device  
2. If air-pressure controlled, attach SCBA  
3. Place Mechanical Device on E2 side (EMT doing compressions)  
4. Place Back Plate next to P1 (airway paramedic) |

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<tr>
<th>Rhythm Check, Defibrillation</th>
<th>Pulse Check, MCD application</th>
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</table>
| **P1** | 1. ETCO2 and Rhythm Check  
2. If indicated (VT/VF), clear and defibrillate patient. If not indicated, dump charge | 1. Pulse Check  
2. After shock applied (or decision not to shock), grasp patient’s shoulder and support head with E2 to lift the upper torso for paramedic to slide Back Plate underneath patient | 1. Pulse Check  
2. After shock applied (or decision not to shock), grasp patient’s shoulder and support head with E1 to lift the upper torso for paramedic to slide Back Plate underneath patient |

<table>
<thead>
<tr>
<th>Airway</th>
<th>Compressions (round 3)</th>
<th>Continue to set up MCD within 2 minutes</th>
</tr>
</thead>
</table>
| **P1** | 1. Provide high quality 1-person BVM breaths every 10 compressions  
2. Provide cadence and count for compressor  
3. Charge defibrillator at 16th breath | 1. If not completed, finish setting up and laying out MCD  
2. Attach the first claw of the Mechanical Device to the Back Plate |

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<thead>
<tr>
<th>Rhythm Check, Defibrillation</th>
<th>Finish Applying and Turn On MCD Device</th>
<th>Pulse Check, MCD application</th>
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</table>
| **P1** | 1. ETCO2 and Rhythm Check  
2. If indicated (VT/VF), clear and defibrillate patient. If not indicated, dump charge | 1. Attach the second claw of the Mechanical Device to the Back Plate  
2. Adjust the compression plunger to the correct depth  
3. Turn on MCD Device  
4. Apply neck strap | 1. Pulse Check  
2. After shock applied (or decision not to shock), assist E1 in applying and turning on MCD device  
3. Mark plunger location with permanent marker |

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**SAN MATEO COUNTY HEALTH EMERGENCY MEDICAL SERVICES**

Field Procedure FP19

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